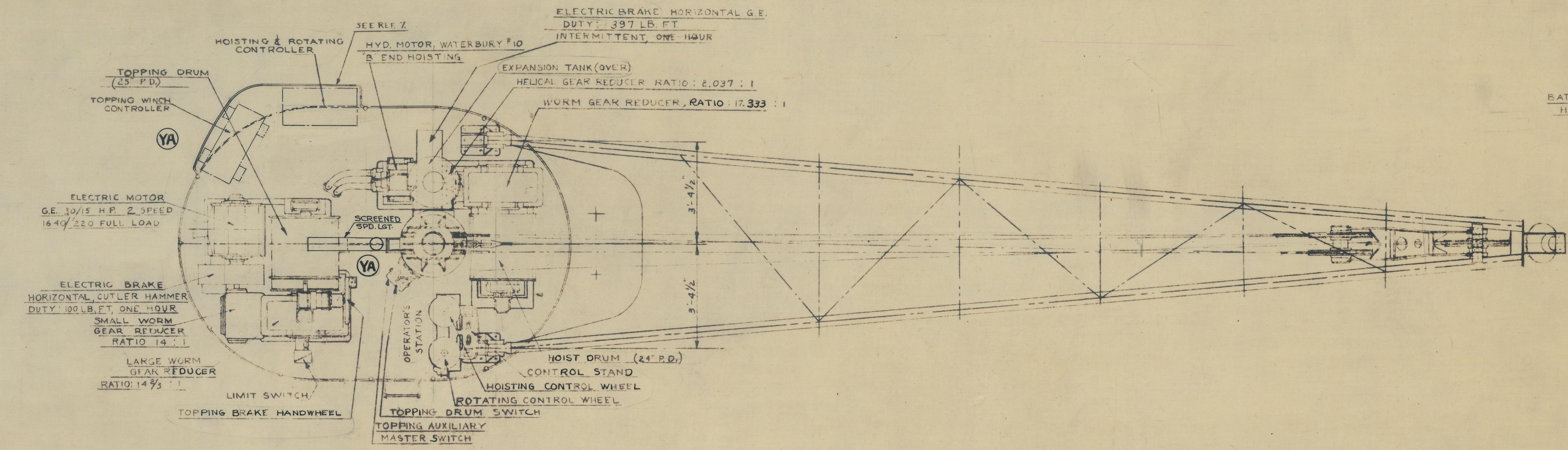




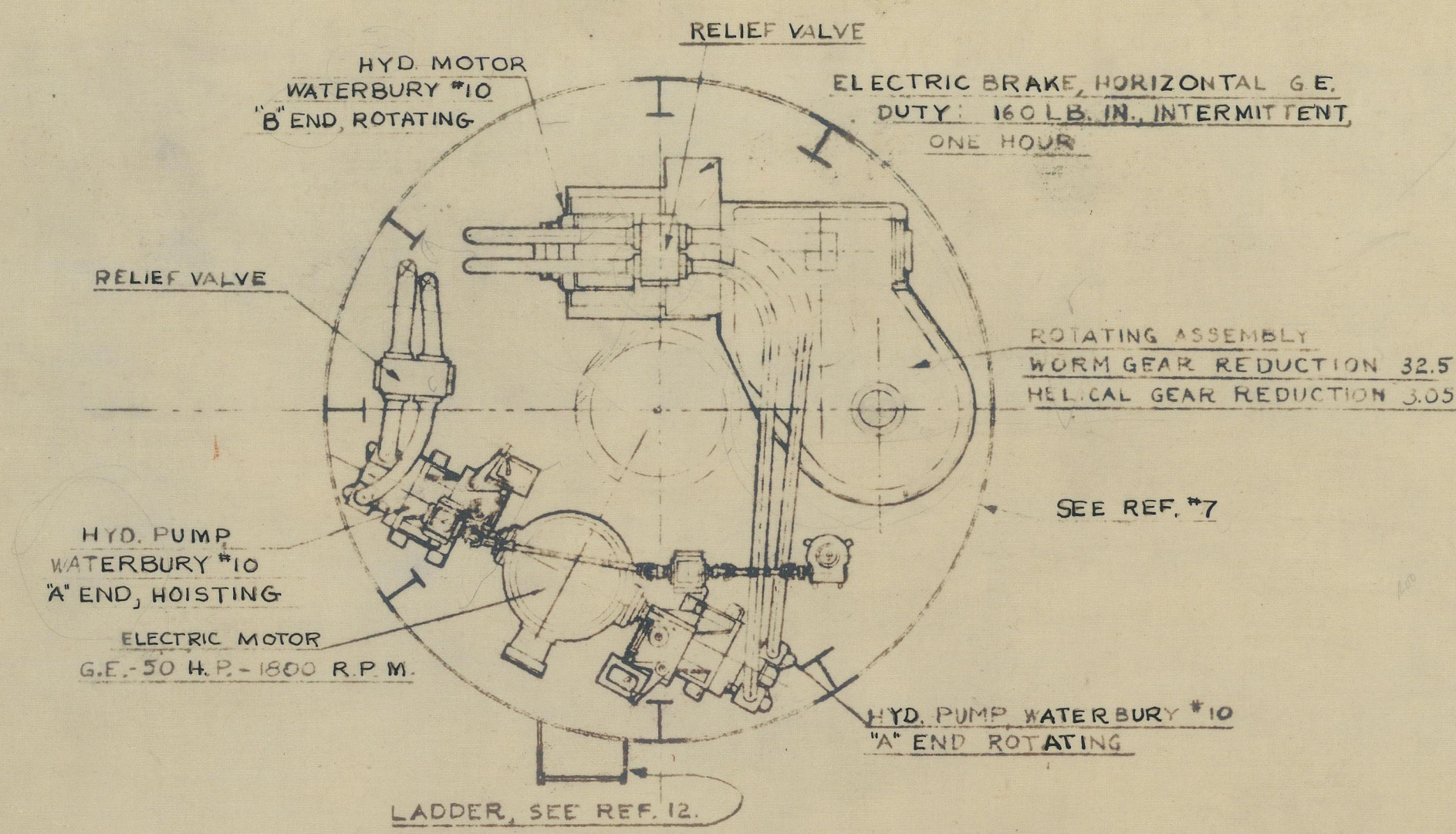
BS 4968

AVP 21 . 8/23/43 . 3735-43 NYBos

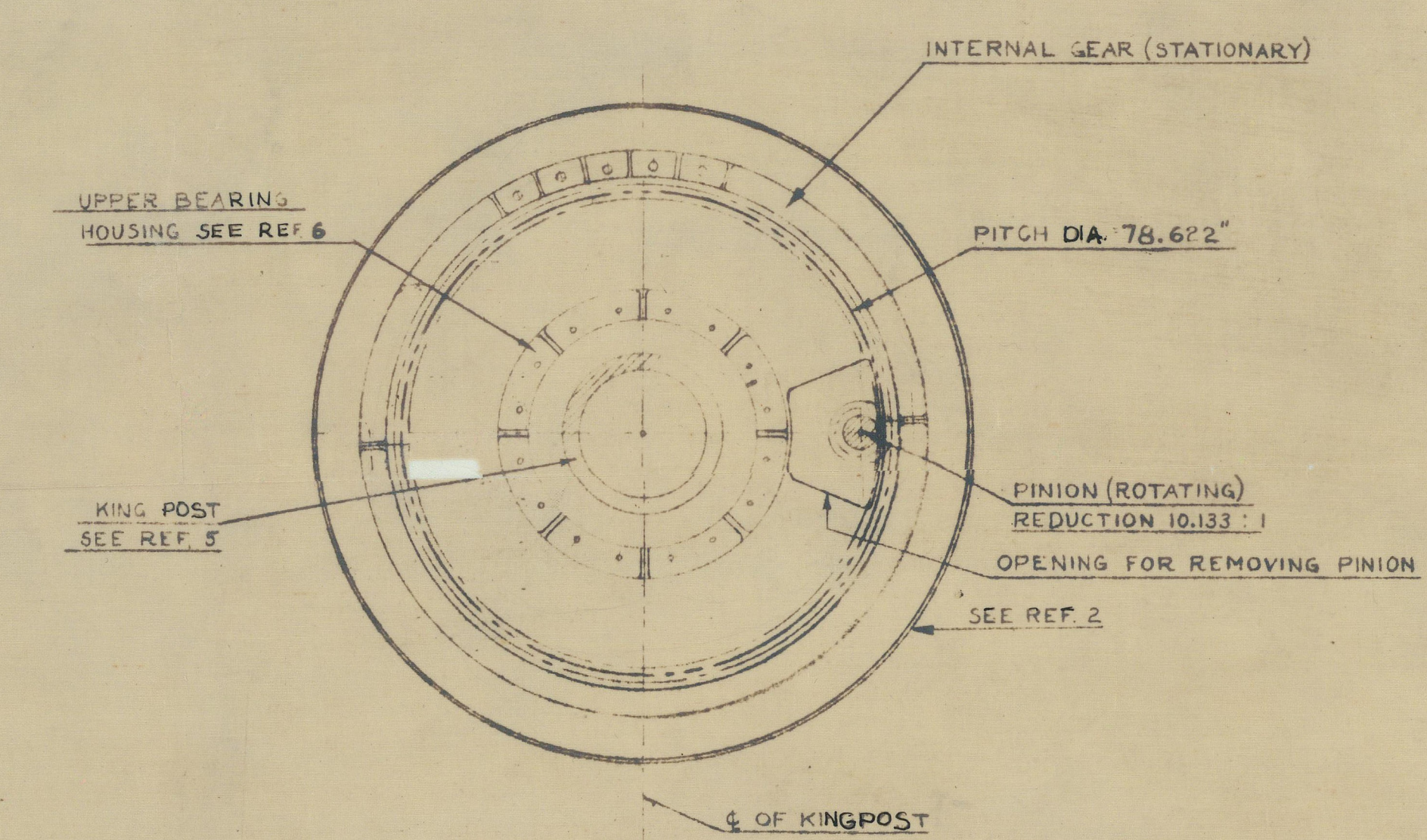




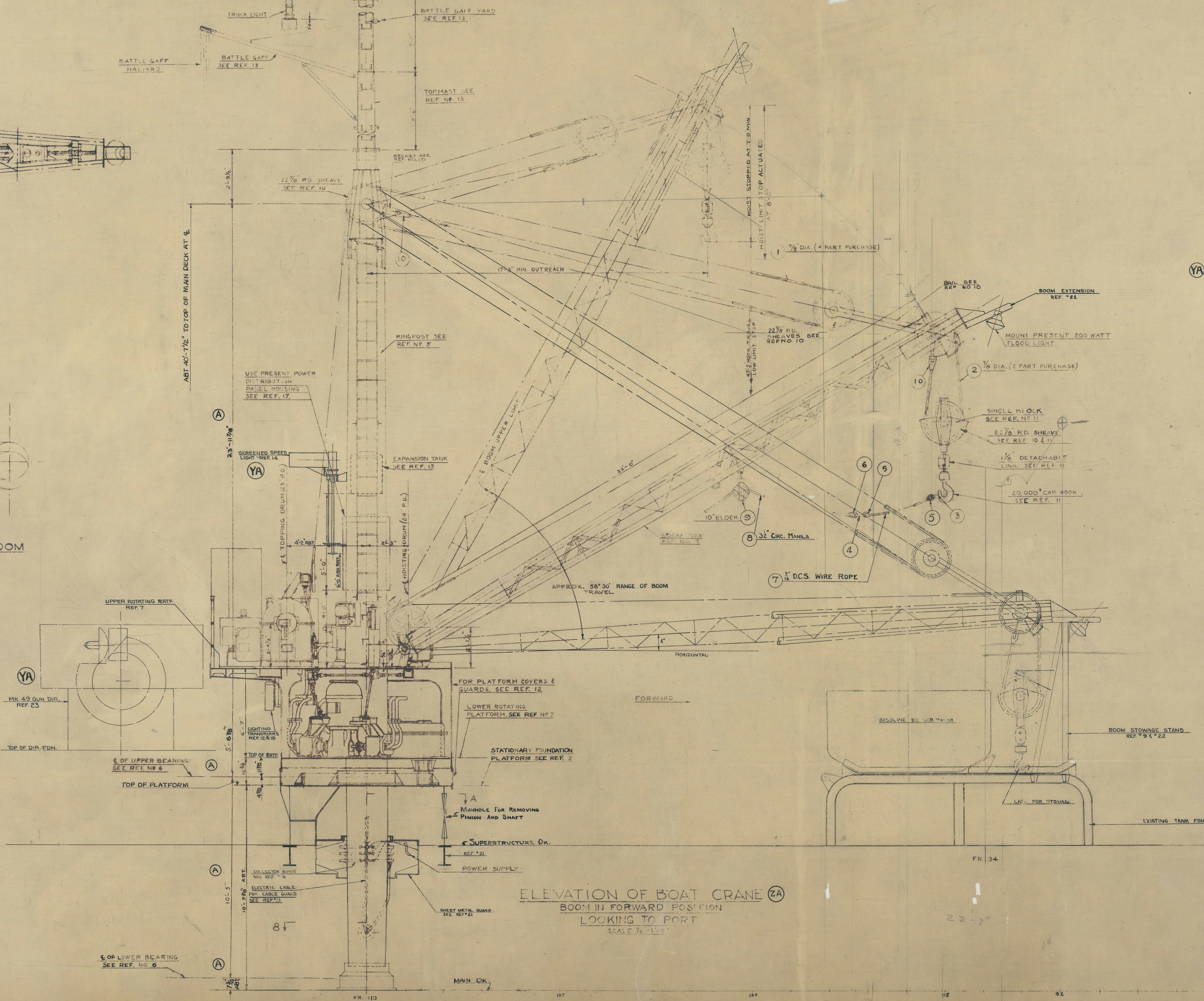
PLAN OF UPPER ROTATING PLATFORM  
SCALE 1/2" = 1'-0"



PLAN OF LOWER ROTATING PLATFORM  
SCALE 1/2" = 1'-0"



PLAN OF STATIONARY FOUNDATION PLATFORM  
SCALE 1/2" = 1'-0"



ELEVATION OF BOAT CRANE  
BOOM IN FORWARD POSITION  
LOOKING TO PORT  
SCALE 1/4" = 1'-0"

REFERENCES

NO.	REV.	DESCRIPTION	PLANT TITLE LETTER NO. ETC.
1	1	BOAT CRANE (20,000 LBS. CAPACITY) SPACE & CLEARANCE DIAGRAM	116181
2	1	BOAT CRANE (20,000 LBS. CAPACITY) FORCE DIAGRAM	116182
3	1	BOAT CRANE (20,000 LBS. CAPACITY) KINEMATIC DIAGRAM	116183
4	1	BOAT CRANE (20,000 LBS. CAPACITY) KINEMATIC DIAGRAM	116184
5	1	BOAT CRANE (20,000 LBS. CAPACITY) KINEMATIC DIAGRAM	116185
6	1	BOAT CRANE (20,000 LBS. CAPACITY) KINEMATIC DIAGRAM	116186
7	1	BOAT CRANE (20,000 LBS. CAPACITY) KINEMATIC DIAGRAM	116187
8	1	BOAT CRANE (20,000 LBS. CAPACITY) KINEMATIC DIAGRAM	116188
9	1	BOAT CRANE (20,000 LBS. CAPACITY) KINEMATIC DIAGRAM	116189
10	1	BOAT CRANE (20,000 LBS. CAPACITY) KINEMATIC DIAGRAM	116190
11	1	BOAT CRANE (20,000 LBS. CAPACITY) KINEMATIC DIAGRAM	116191
12	1	BOAT CRANE (20,000 LBS. CAPACITY) KINEMATIC DIAGRAM	116192
13	1	BOAT CRANE (20,000 LBS. CAPACITY) KINEMATIC DIAGRAM	116193
14	1	BOAT CRANE (20,000 LBS. CAPACITY) KINEMATIC DIAGRAM	116194
15	1	BOAT CRANE (20,000 LBS. CAPACITY) KINEMATIC DIAGRAM	116195
16	1	BOAT CRANE (20,000 LBS. CAPACITY) KINEMATIC DIAGRAM	116196
17	1	BOAT CRANE (20,000 LBS. CAPACITY) KINEMATIC DIAGRAM	116197
18	1	BOAT CRANE (20,000 LBS. CAPACITY) KINEMATIC DIAGRAM	116198
19	1	BOAT CRANE (20,000 LBS. CAPACITY) KINEMATIC DIAGRAM	116199
20	1	BOAT CRANE (20,000 LBS. CAPACITY) KINEMATIC DIAGRAM	116200

CRANE CAPACITIES

HOISTING		
	WORKING LOAD	WORKING LOAD
	ON HOOR	ON HOOR
	20,000 LBS.	20,000 LBS.
HOOK SPEED	20 F.P.M.	80 F.P.M.
SPEED HYDRAULIC PUMP A END	580 R.P.M.	580 R.P.M.
SPEED HYDRAULIC MOTOR B END	232 R.P.M.	922 R.P.M.
HELICAL GEAR REDUCTION	2.037 : 1	2.037 : 1
WORM GEAR REDUCTION	17.333 : 1	17.333 : 1
TOTAL REDUCTION	35.3 : 1	35.3 : 1
DRUM SPEED	6.57 R.P.M.	26.1 R.P.M.
ROPE SPEED AT DRUM	40 F.P.M.	160 F.P.M.
DRUM PITCH DIA.	24"	24"
ROPE PULL AT DRUM	12,300 LBS.	3100 LBS.
BLOCK PURCHASE (NO. PARTS)	2	2
DRUM STORAGE	132 FT. LIVE + 182 FT. LIVE + 272 DEAD TURNS	272 DEAD TURNS

ROTATING

	WORKING LOAD	WORKING LOAD
	ON HOOR	ON HOOR
	20,000 LBS.	20,000 LBS.
CRANE ROTATES THRU 360° (NO STOP)	16.40 R.P.M.	16.40 R.P.M.
PRIMARY WORM REDUCTION	14.666 : 1	14.666 : 1
SECONDARY WORM REDUCTION	14. : 1	14. : 1
TOTAL REDUCTION	205.6 : 1	205.6 : 1
DRUM SPEED	8 R.P.M.	8 R.P.M.
ROPE SPEED AT DRUM	50 F.P.M.	50 F.P.M.
DRUM PITCH DIA.	28"	28"
ROPE PULL AT DRUM	11,950 LBS.	11,950 LBS.
BLOCK PURCHASE (NO. PARTS)	4	4
DRUM STORAGE	217 FT. LIVE + 272 DEAD TURNS	272 DEAD TURNS
AVERAGE BOOM TRAVEL	1/2" PER SEC.	1/2" PER SEC.

HOISTING & ROTATING HYDRAULIC PUMP

	HOISTING	ROTATING
HYDRAULIC PUMP DUTY	580 R.P.M. - 6800 L.B. IN.	580 R.P.M. - 6800 L.B. IN.
ROTATING & HOIST DRIVES OPERATE SIMULTANEOUSLY	1740 R.P.M.	1740 R.P.M.
MOTOR SPEED	3 : 1	3 : 1
SPIRAL BEVEL GEAR REDUCTION	580 R.P.M.	580 R.P.M.
SPEED OF HYDRAULIC PUMP (TWO A ENDS)	23.4 G.P.M.	52.8 G.P.M.
MAX. PUMPAGE	5,000 L.B.	58.6 G.P.M.

LIST OF MATERIAL

ITEM NO.	QUANTITY	DESCRIPTION	CONTRACT NO.	REMARKS
1	1	1/2" D TOPPING WIRE UNCOATED		
2	1	1/2" D HOISTING WIRE UNCOATED		
3	1	1/2" D SHACKLE (W. R. 111)		
4	1	1/2" D SHACKLE (W. R. 111)		
5	1	1/2" D SHACKLE (W. R. 111)		
6	1	1/2" D SHACKLE (W. R. 111)		
7	1	1/2" D SHACKLE (W. R. 111)		
8	1	1/2" D SHACKLE (W. R. 111)		
9	1	1/2" D SHACKLE (W. R. 111)		
10	1	1/2" D SHACKLE (W. R. 111)		

GENERAL NOTES

- ONE BOAT CRANE REQUIRED PER SHIP.
- MACHINERY FURNISHED BY 1" 10" M. L. BAYARD & CO. INC. PHILADELPHIA, PENNA. SEE REF. 11.
- 3/4" ANCHOR SHACKLE SIMILAR TO LAUGHLIN CAT. 125, PG. 2, FIG. 5-213 OR EQUAL.
- 3/4" ANCHOR SHACKLE SIMILAR TO LAUGHLIN CAT. 125, PG. 2, FIG. 5-213 OR EQUAL.
- 3/4" ANCHOR SHACKLE SIMILAR TO LAUGHLIN CAT. 125, PG. 2, FIG. 5-213 OR EQUAL.
- 3/4" ANCHOR SHACKLE SIMILAR TO LAUGHLIN CAT. 125, PG. 2, FIG. 5-213 OR EQUAL.
- 3/4" ANCHOR SHACKLE SIMILAR TO LAUGHLIN CAT. 125, PG. 2, FIG. 5-213 OR EQUAL.
- 3/4" ANCHOR SHACKLE SIMILAR TO LAUGHLIN CAT. 125, PG. 2, FIG. 5-213 OR EQUAL.
- 3/4" ANCHOR SHACKLE SIMILAR TO LAUGHLIN CAT. 125, PG. 2, FIG. 5-213 OR EQUAL.
- 3/4" ANCHOR SHACKLE SIMILAR TO LAUGHLIN CAT. 125, PG. 2, FIG. 5-213 OR EQUAL.

ALL MATERIAL SHOWN ON THIS PLAN  
BEING FURNISHED BY CONTRACTOR.

ALTERATIONS

NO.	DESCRIPTION	DATE
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SEAPLANE TENDERS (SMALL)

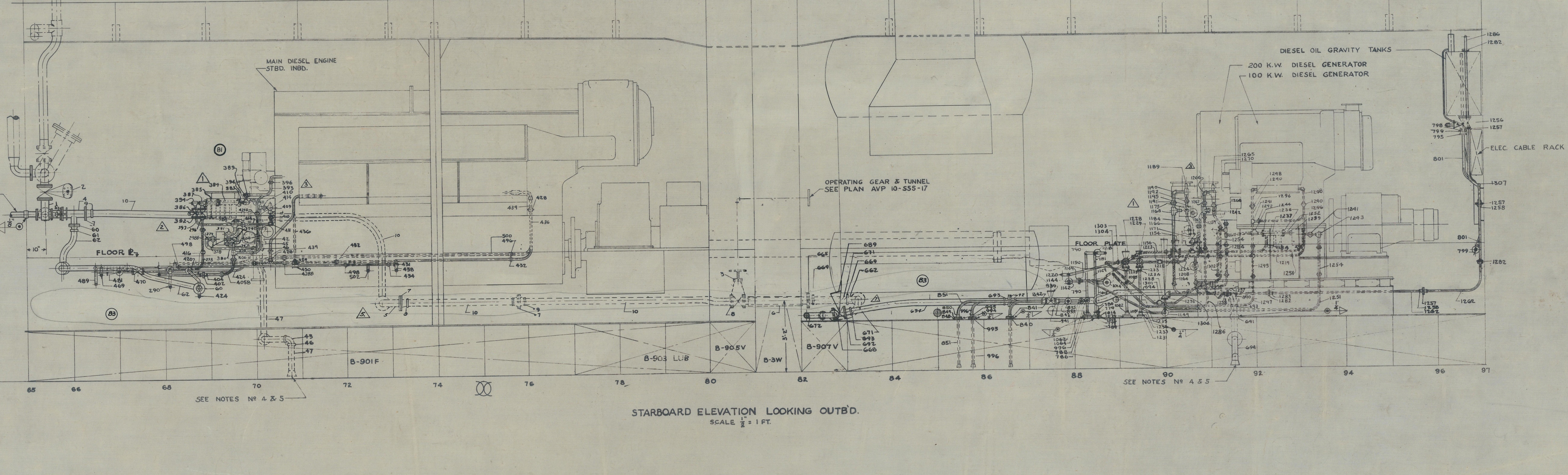
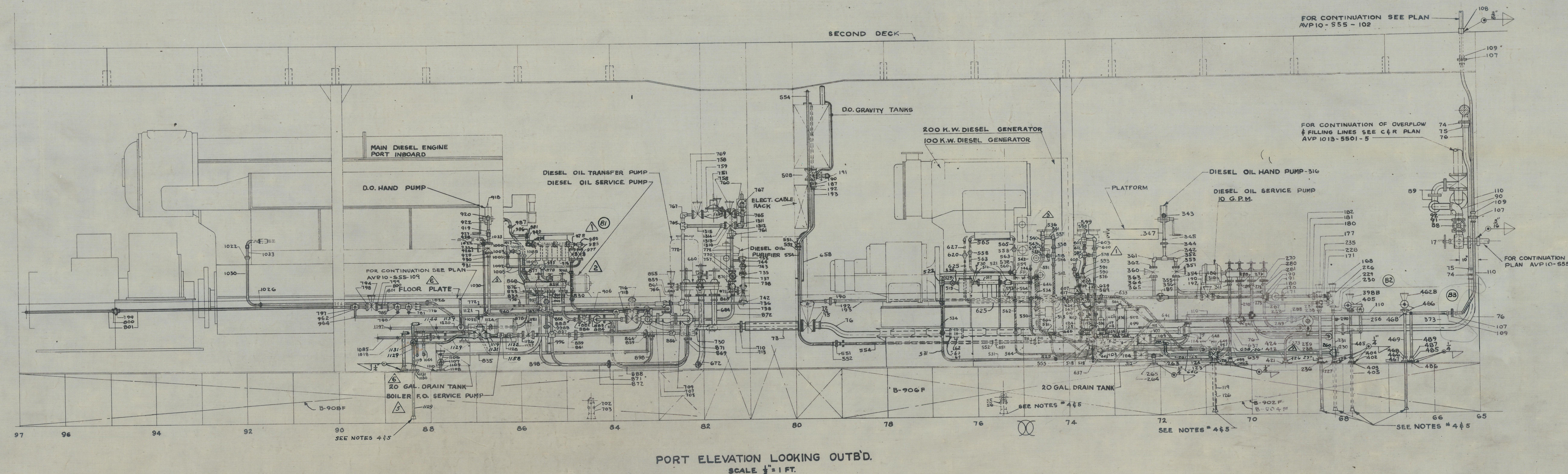
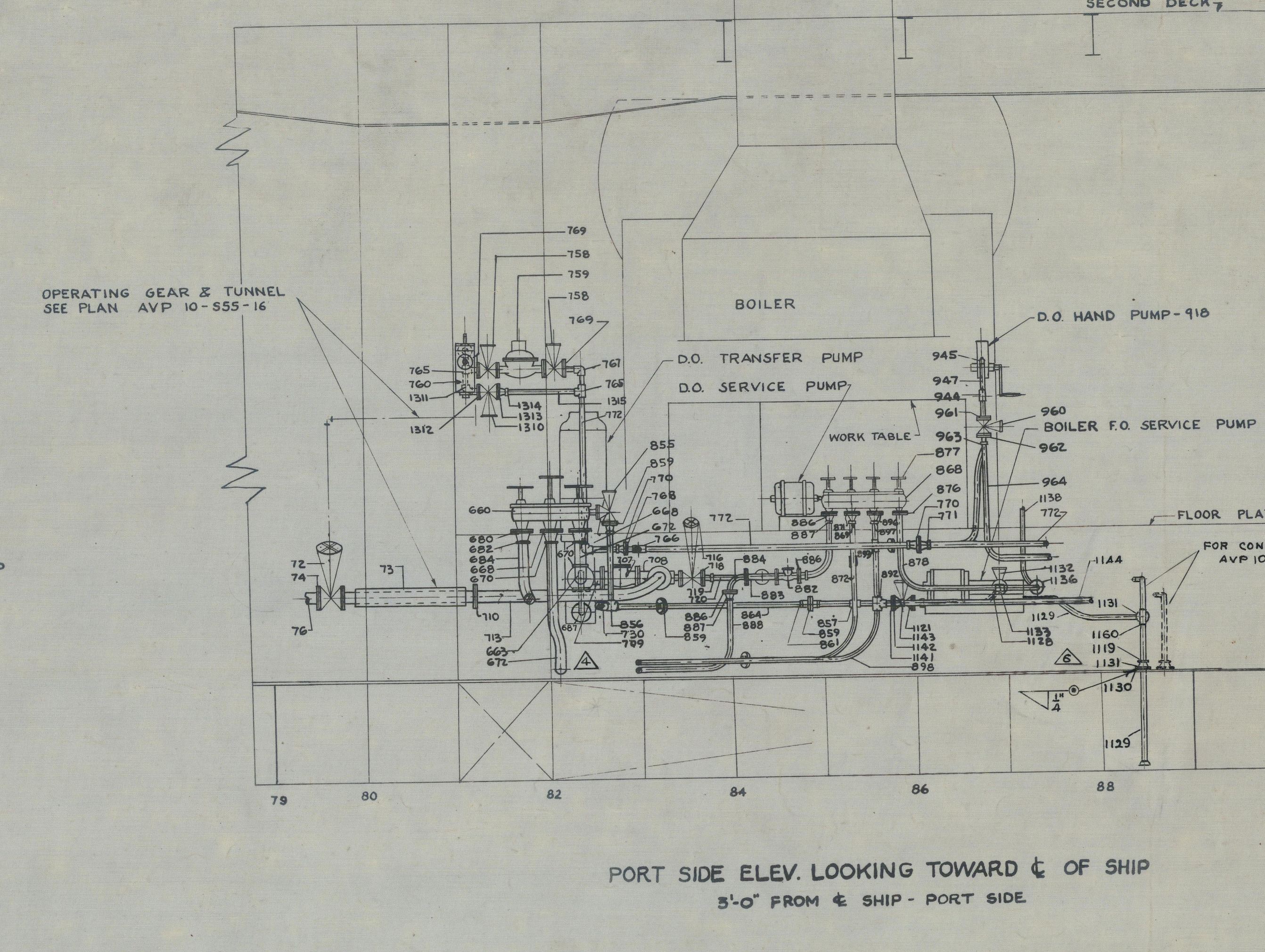
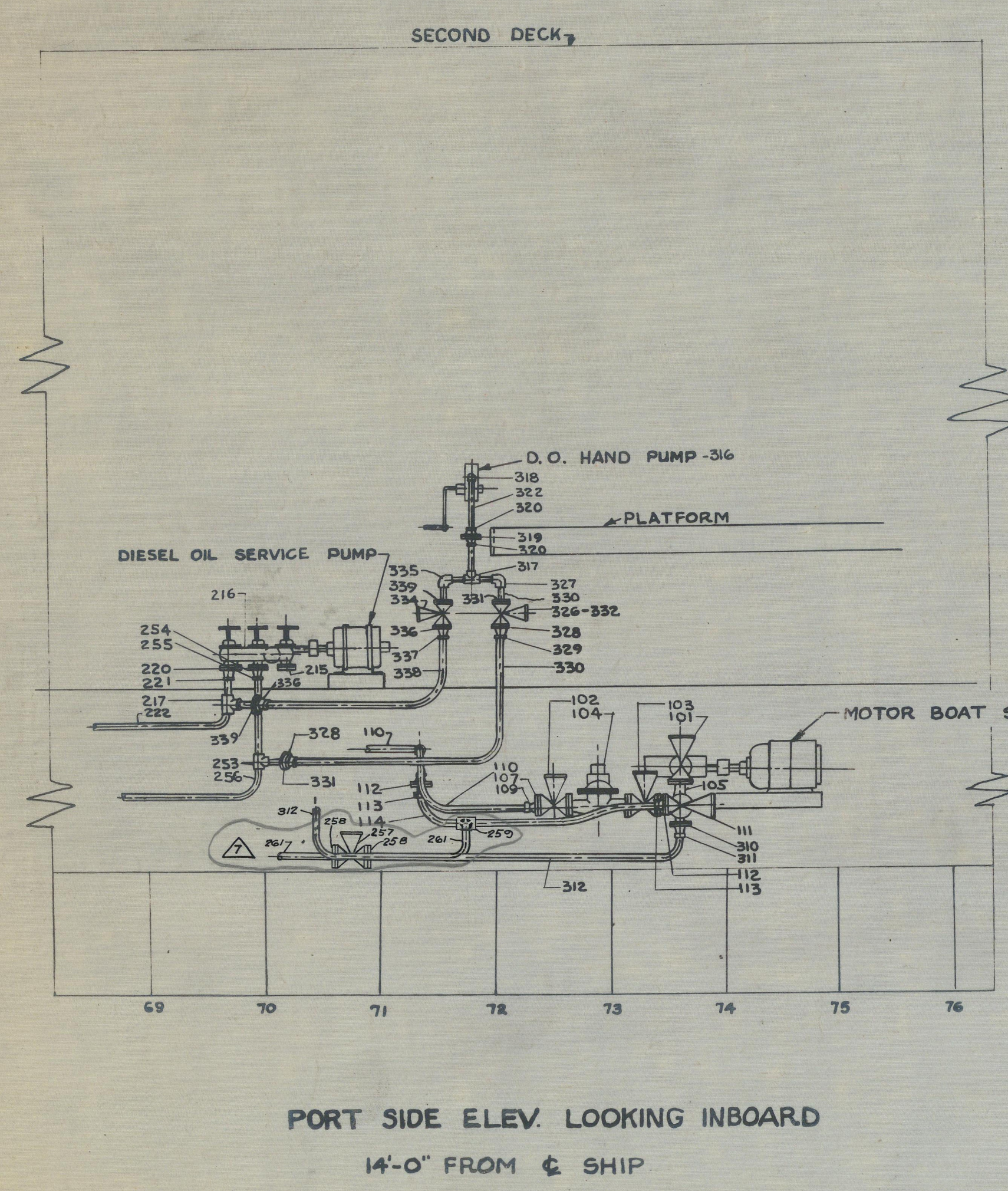
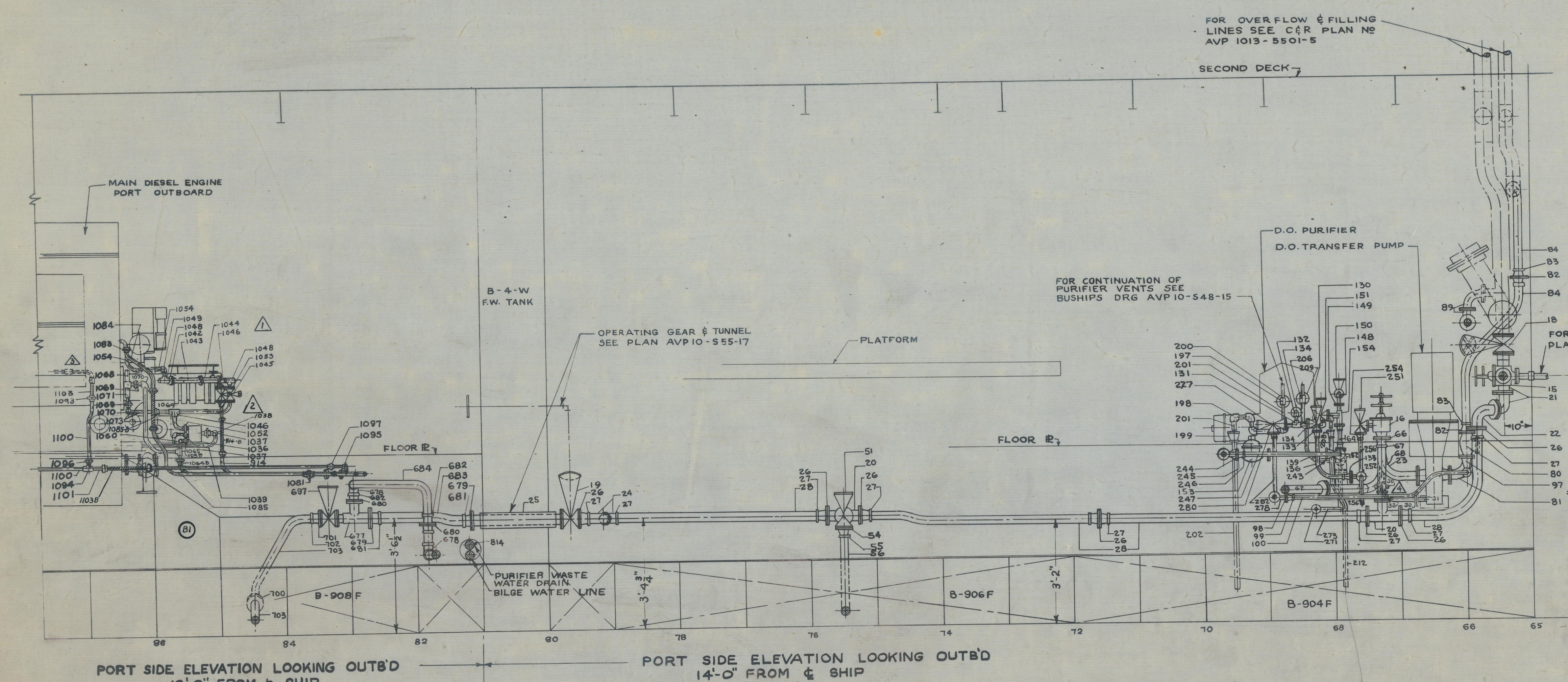
PLAN NO. AVP103-1701-62

BOAT CRANE  
(20,000 LBS. CAPACITY)  
GENERAL ARRANGEMENT

BUREAU OF SHIPS PLANT NUMBER  
NO. 414867-B

INDEXED





WELDING SYMBOLS:  
 CONTINUOUS FILLET WELDED ALL AROUND, BOTH SIDES, IN FIELD  
 CONTINUOUS FILLET WELDED ALL AROUND, ONE SIDE, IN FIELD

THIS DRAWING SUPERSEDES PLAN OF SAME NUMBER DATED 2/21/41, ALTERATION Q/B1.

- GENERAL NOTES:  
 SEE PLAN AVP 10-55-88
- REFERENCE PLANS:
- | TITLE   | DWG. NUMBER  |
|---|--------------|
| DIESEL F.O. SYST-ENG. ROOM ARRGT-PLAN               | AVP 10-55-88 |
| DIESEL F.O. SYST-ENG. ROOM ARRGT-SECTION            | AVP 10-55-89 |
| DIESEL F.O. SYST-ENG. ROOM ARRGT-MAT'L LIST         | AVP 10-55-90 |
| DIESEL F.O. SYST-ENG. ROOM ARRGT-MAT'L LIST         | AVP 10-55-91 |
| DIESEL F.O. SYST-100 K.W. ENGINE PIPING ARRANGEMENT | AVP 10-55-92 |
| DIESEL F.O. SYST-200 K.W. ENGINE PIPING ARRANGEMENT | AVP 10-55-93 |
| DIESEL F.O. SYST-MAIN ENGINE PIPING ARRANGEMENT     | AVP 10-55-95 |
| DIESEL F.O. SYST-PURIFIER PIPING ARRANGEMENT        | AVP 10-55-96 |

ALTERATIONS

MARK	DATE	DESCRIPTION	BY	CHKD
1	10/1/41	REVISION 1	W. J. DALLAN	W. J. DALLAN
2	10/1/41	REVISION 2	W. J. DALLAN	W. J. DALLAN
3	10/1/41	REVISION 3	W. J. DALLAN	W. J. DALLAN
4	10/1/41	REVISION 4	W. J. DALLAN	W. J. DALLAN
5	10/1/41	REVISION 5	W. J. DALLAN	W. J. DALLAN
6	10/1/41	REVISION 6	W. J. DALLAN	W. J. DALLAN
7	10/1/41	REVISION 7	W. J. DALLAN	W. J. DALLAN
8	10/1/41	REVISION 8	W. J. DALLAN	W. J. DALLAN
9	10/1/41	REVISION 9	W. J. DALLAN	W. J. DALLAN
10	10/1/41	REVISION 10	W. J. DALLAN	W. J. DALLAN

NAVY YARD, BOSTON  
 APPROVED FOR  
 AVP 21 & 22  
 W. J. DALLAN

FORWARDED TO: BU IN LET. NO. DATED: 10 JAN 1941

APPROVED BY: BU IN LET. NO. DATED: 10 JAN 1941

DESIGNER: W. J. DALLAN

TRACER: W. J. DALLAN

CHIEF DRAFTSMAN: W. J. DALLAN

SUPERVISOR: W. J. DALLAN

SHIP INSPECTION OFFICER: W. J. DALLAN

PLANNING OFFICER: W. J. DALLAN

BUREAU OF ENGINEERING FILE NO.:

INDEX GROUP FILE NO.:

AVP 10-55-87 ALT. 7 B3